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Notice of Allowability	Application No.	Applicant(s)	
	10/672,083	LE GALLO ET AL.	
	Examiner	Art Unit	
	Suezu Ellis	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed January 13, 2006.
2. ☒ The allowed claim(s) is/are 1,2,4,6-12 and 14-20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Karin Butchko on February 24, 2006.

The application has been amended as follows:

In claim 1, line 5, between "distribution of" and "light", remove "the".

In claim 1, line 6, remove "a reference histogram," and replace with --a reference histogram to detect an obstruction in a path of the distribution of light received by the light sensor,--.

In claim 10, line 8, between "distribution of" and "light", remove "the".

In claim 15, line 2, replace "on" with --by--.

The following is an examiner's statement of reasons for allowance:

With respect to claims 1, prior art fails to teach or reasonably suggest an obstruction detector having a circuit that analyzes a distribution of light received by a light sensor, wherein the distribution of light defines a histogram of gray levels of a plurality of imaging elements, and the circuit compares the histogram of gray levels of the distribution of light received by the light sensor to a reference histogram to detect an

obstruction in a path of the distribution of light received by the light sensor, and the circuit updates the reference histogram, in addition to the other limitations of the claim.

With respect to claim 10, prior art fails to teach or reasonably suggest an automobile part having a circuit that analyzes a distribution of light received by a light sensor, wherein the distribution of light defines a histogram of gray levels of a plurality of imaging elements, the circuit compares the histogram of gray levels of the distribution of light received by the light sensor to a reference histogram, and the circuit updates the reference histogram, in addition to the other limitations of the claim.

With respect to claim 12, prior art fails to teach or reasonably suggest a method of detecting an obstruction in a path of an openable member comprising the step of detecting light along a closing line of the openable member with a light sensor to form a distribution of light, wherein the light sensor has a plurality of imaging elements and the distribution of light defines a histogram of gray levels of the plurality of imaging elements and comparing the histogram of gray levels of distribution of light along the closing line with a reference histogram, in addition to the other limitations of the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Watson, III (US 4,868,871) discloses an image tracker that analyzes a distribution of light received by a light sensor, wherein the distribution of light defines a histogram of gray levels of a plurality of imaging elements, comparing the histogram of gray levels of the distribution of light received by the sensor to a reference histogram and updating the histogram. Watson, III fails to disclose the image tracker used in detecting an obstruction in a path of the distribution of light received by the light sensor or in a path of an openable member. Watson, III further fails to disclose the image tracker used in an automobile vehicle part.

Telephone/Fax Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suez Ellis whose telephone number is (571) 272-2868. The examiner can normally be reached on 8:30am-5pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2878

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Stephone B. Allen
Primary Examiner